

WHAT IS CLAIMED IS:

1. A gaming peripheral device configured to connect to an interface of a home video game system, wherein the interface provides access to a processing system of the home video game system and comprises first and second power supply lines having different voltages, first and second ground lines, an input signal line normally at a first level, a serial data out line, a serial data in line, a select signal line, a clocking signal line, and an interrupt signal line, and wherein the home video game system detects that the gaming peripheral device is connected to the interface when the input signal line is at a second level different than the first level, the gaming peripheral device comprising:

an electrical component; and

a connector coupled to the electrical component, wherein the connector comprises:

a first connecting element that connects, in use, to the serial data out line;

a second connecting element that connects, in use, to the serial data in line;

a third connecting element that connects, in use, to the select signal line;

a fourth connecting element that connects, in use, to the clocking signal line;

a fifth connecting element that connects, in use, to the interrupt signal line;

a sixth connecting element that connects, in use, to the input signal line;

seventh, eighth and ninth connecting elements that each connects, in use, to the first power supply line; and

a tenth connecting element that connects, in use, to the first ground line,

wherein the input signal line is supplied with a signal from the sixth connecting element of the connector which causes the input signal line to be at the second level when the gaming peripheral device is connected to the interface of the home video game system.

2. The gaming peripheral device according to claim 1, wherein the connector further comprises an eleventh connecting element that connects, in use, to the second ground line and a twelfth connecting element that connects, in use, to the second power supply line.

3. The gaming peripheral device according to claim 1, wherein the first power supply line is at +3.3V and the second power supply line is at +5V.

4. The gaming peripheral device according to claim 1, wherein the electrical component comprises a flash memory.

5. The gaming peripheral device according to claim 1, wherein the electrical component comprises a non-volatile memory.

6. The gaming peripheral device according to claim 1, wherein the interface of the home video game system further comprises at least one channel parameter register.

7. The gaming peripheral device according to claim 1, wherein the interface of the home video game system further comprises at least one direct memory access (DMA) address register.

8. The gaming peripheral device according to claim 1, wherein the interface of the home video game system further comprises at least one direct memory access (DMA) transfer length register.

9. The gaming peripheral device according to claim 1, wherein the interface of the home video game system further comprises at least one control register.

10. The gaming peripheral device according to claim 1, wherein the interface of the home video game system further comprises at least one data register.

11. The gaming peripheral device according to claim 1, wherein the input signal line, the serial data out line, the serial data in line, the select signal line, the clocking signal line, and the interrupt signal line are each part of a bus that connects to the processing system of the home video game system.

12. The gaming peripheral device according to claim 1, wherein the first level is a low level and the second level is a high level.

13. A memory device configured to connect to an interface of a home video game system, wherein the interface provides access to a processing system of the home video game system and comprises first and second power supply lines

having different voltages, first and second ground lines, an input signal line normally at a first level, a serial data out line, a serial data in line, a select signal line, a clocking signal line, and an interrupt signal line, and wherein the home video game system detects that the memory device is connected to the interface when the input signal line is at a second level different than the first level, the memory device comprising:

- a memory medium; and

- a connector coupled to the memory medium, wherein the connector comprises:

 - a first pin that connects, in use, to the serial data out line;

 - a second pin that connects, in use, to the serial data in line;

 - a third pin that connects, in use, to the select signal line;

 - a fourth pin that connects, in use, to the clocking signal line;

 - a fifth pin that connects, in use, to the interrupt signal line;

 - a sixth pin that connects, in use, to the input signal line;

 - seventh, eighth and ninth pins that each connects, in use, to the first power supply line; and

 - a tenth pin that connects, in use, to the first ground line,

wherein the input signal line is supplied with a signal from the sixth pin of the connector which causes the input signal line to be at the second level when the memory device is connected to the interface of the home video game system.

14. The memory device according to claim 13, wherein the connector further comprises an eleventh pin that connects, in use, to the second ground line and a twelfth pin that connects, in use, to the second power supply line.

15. The memory device according to claim 13, wherein the first power supply line is at +3.3V and the second power supply line is at +5V.

16. The memory device according to claim 13, wherein the memory medium comprises a flash memory.

17. The memory device according to claim 13, wherein the memory medium comprises a non-volatile memory.

18. The memory device according to claim 13, wherein the processing system of the home video game system writes game-related data to the memory medium via the interface.

19. The memory device according to claim 13, wherein the processing system of the home video game system reads game-related data from the memory medium via the interface.

20. The memory device according to claim 13, wherein the memory medium is contained in a cartridge adapted for insertion into a slot formed in a housing of the home video game system.

21. The memory device according to claim 13, wherein the interface of the home video game system further comprises at least one channel parameter register.

22. The memory device according to claim 13, wherein the interface of the home video game system further comprises at least one direct memory access (DMA) address register.

23. The memory device according to claim 13, wherein the interface of the home video game system further comprises at least one direct memory access (DMA) transfer length register.

24. The memory device according to claim 13, wherein the interface of the home video game system further comprises at least one control register.

25. The memory device according to claim 13, wherein the interface of the home video game system further comprises at least one data register.

26. The memory device according to claim 13, wherein the input signal line, the serial data out line, the serial data in line, the select signal line, the clocking signal line, and the interrupt signal line are each part of a bus that connects to the processing system of the home video game system.

27. The memory device according to claim 13, wherein the first level is a low level and the second level is a high level.

28. A memory device configured to connect to an interface of a home video game system, wherein the interface provides access to a processing system of the home video game system and comprises first and second power supply lines having different voltages, first and second ground lines, an input signal line normally at a low level, a serial data out line, a serial data in line, a select signal

line, a clocking signal line, and an interrupt signal line, and wherein the home video game system detects that the memory device is connected to the interface when the input signal line is at a high level, the memory device comprising:

a memory medium; and

a connector coupled to the memory medium, wherein the connector comprises:

a first pin that connects, in use, to the serial data out line;

a second pin that connects, in use, to the serial data in line;

a third pin that connects, in use, to the select signal line;

a fourth pin that connects, in use, to the clocking signal line;

a fifth pin that connects, in use, to the interrupt signal line;

a sixth pin that connects, in use, to the input signal line;

seventh, eighth and ninth pins that each connects, in use, to the first power supply line;

a tenth pin that connects, in use, to the first ground line;

an eleventh pin that connects, in use, to the second ground line; and

a twelfth pin that connects, in use, to the second power supply line.

wherein the input signal line is supplied with a signal from the sixth pin of the connector which causes the input signal line to be at the high level when the memory device is connected to the interface of the home video game system.

29. A memory device configured to connect to an interface of a home video game system, wherein the interface provides access to a processing system of the home video game system and comprises first and second power supply lines having different voltages, first and second ground lines, an input signal line normally at a first level, a serial data out line, a serial data in line, a select signal line, a clocking signal line, and an interrupt signal line, and wherein the home video game system detects that the memory device is connected to the interface when the input signal line is at a second level different than the first level, the memory device comprising:

memory means; and

a connector coupled to the memory means, wherein the connector comprises:

first connecting means for connecting, in use, to the serial data out line;

second connecting means for connecting, in use, to the serial data in line;

third connecting means for connecting, in use, to the select signal line;

fourth connecting means for connecting, in use, to the clocking signal line;

fifth connecting means for connecting, in use, to the interrupt signal line;

sixth connecting means for connecting, in use, to the input signal line;

seventh, eighth and ninth connecting means for each connecting, in use, to the first power supply line; and

tenth connecting means for connecting, in use, to the first ground line,

wherein the input signal line is supplied with a signal from the sixth connecting means of the connector which causes the input signal line to be at the second level when the memory device is connected to the interface of the home video game system.

30. The memory device according to claim 29, wherein the first level is a low level and the second level is a high level.

31. A memory device configured to connect to an interface of a home video game system, wherein the interface provides access to a processing system of the home video game system and comprises first and second power supply lines having different voltages, first and second ground lines, an input signal line normally at a low level, a serial data out line, a serial data in line, a select signal line, a clocking signal line, and an interrupt signal line, and wherein the home

video game system detects that the memory device is connected to the interface when the input signal line is at a high level, the memory device comprising:

memory means; and

a connector coupled to the memory means, wherein the connector comprises:

first connecting means for connecting, in use, to the serial data out line;

second connecting means for connecting, in use, to the serial data in line;

third connecting means for connecting, in use, to the select signal line;

fourth connecting means for connecting, in use, to the clocking signal line;

fifth connecting means for connecting, in use, to the interrupt signal line;

sixth connecting means for connecting, in use, to the input signal line;

seventh, eighth and ninth connecting means for each connecting, in use, to the first power supply line;

tenth connecting means for connecting, in use, to the first ground line;

eleventh connecting means for connecting, in use, to the second ground line; and

twelfth connecting means for connecting, in use, to the second power supply line,

wherein the input signal line is supplied with a signal from the sixth connecting means of the connector which causes the input signal line to be at the high level when the memory device is connected to the interface of the home video game system.